REMARKS

Claims 37-39 and 45 have been canceled. Claims 1 and 31 have been amended to clarify the scope of these claims. In claims 1 and 31, the limitation "a filter covering said housing" has been amended to specify "a filter attached to said housing". The intended meaning of the filter covering the housing is that the filter is attached to the housing rather than the cavity of the cartridge. This embodiment of the present invention is described on page 9, lines 1-3 of the present application. Claims 1 and 31 have further been amended to clarify that the housing (containing the sensor) is coupled to the cartridge as described on page 8, lines 15-17 of the PCT application. Claims 32 and 42 have been amended to clarify that the filter of the housing is exposed to the flow of gases.

Claims 1, 17, 26-36, 42 and 46-51 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over United States Patent No. 6,272,933 to Gradon in view of United States Patent No. 4,366,821 to Wittmaier et al. Reconsideration and withdrawal of the rejection is requested.

Neither Gradon nor Wittmaier disclose the arrangement of claims 1 and 31 wherein "a housing releasably containing said sensor, . . . a filter attached to said housing". The filter and housing prevent contamination of the sensor so that the sensor may be reused between patients, while avoiding cross-contamination between the patients. The housing including filter can be disposed of appropriately (recycled), or the housing and filter can be sterilized for reuse. It is significantly easier to sterilize the housing and filter compared to sterilizing the delicate sensor device.

Applicants note the Examiner states it is possible to take sensors 34 and 35 of Gradon out of their housing. There is no such disclosure in Gradon. The Assignee of the present application is the owner of United States Patent No. 6,272,933 to Gradon and the Assignee confirms that the sensor element 34, 35 cannot be released from their housings.

In Paragraphs 7 and 8 of the Final Office Action, the Examiner presents an extremely broad interpretation of claims 1 and 31. The Examiner has put forward an argument that the wording of claims 1 and 31 is intended to include a housing and sensor that may be released from the housing only by destroying the housing and/or sensor, the sensor otherwise not being releasable from the housing.

The Examiner bases this argument on the fact that the claim language does not explicitly state that the sensor must be functionally preserved. Applicants believe such a broad interpretation is clearly contrary to the plain meaning of the limitation. Clearly, the word "releasable" must mean the sensor can be released from the housing without damage to the sensor, otherwise the word releasable would be redundant in the claim.

The Examiner goes on to reference *In re Dulberg* and that the separation of elements where removability would be desirable, is a design consideration within the skill of the art. However, the present invention is not concerned with separating the elements of the prior art. The housing 25 is an additional element in the sensing device of the present invention when compared side-by-side with the prior art. The sensor 24 of the present invention is equivalent to the flow probe 19 of Gradon, which includes sensing means 34 and 35 and sensor housing means 32 and 33. The present invention relates to an additional housing that may, for example, releasably contain the flow probe 19 of Gradon. The additional housing could, for example, be coupled to the connector 42 of Gradon.

If the sensor were to be used in a first system providing humidified gases to a first patient, and a second system providing humidified gases to a second patient, the housing containing the sensor could be removed from the cartridge of the first system. The housing could be disposed of or set aside for sterilization and the sensor fitted to a new or previously used but sterilized housing before fitting into the cartridge of the second system. In this way, the present invention allows use of, for example, the sensor probe of Gradon, across a plurality of patients without cross-contamination.

Wittmaier also provides no disclosure of an additional housing 25 including filter in which a sensor may be releasably contained as described above.

Finally, the Examiner references one meaning for housing as given in Webster's New World Dictionary. Applicants refer the Examiner to another equally valid meaning for housing, that is, "a rigid casing that encloses and protects any piece of moving or delicate equipment" as defined in the New Shorter Oxford English Dictionary. A similar meaning may also be found in the Examiner's preferred Webster's New World Dictionary which the Examiner appears to have overlooked - see meaning number 6 of the copy of page 655 the Examiner provided with the Office Action.

As neither Gradon nor Wittmaier include a housing equivalent to the housing defined in the claims, Applicant submits that claims 1 and 31 are not rendered obvious. Reconsideration and allowance of claims 1 and 31 is requested.

Claims 17, 26-30, 32-36, 42 and 46-51 are dependent upon one of claims 1 or 31 which Applicants submit are allowable. Therefore, Applicants submit that claims 17, 26-30, 32-36, 42 and 46-51 are allowable. Reconsideration and allowance of claims 1 and 31 is requested.

The Examiner has further highlighted United States Patent No. 6,039,696 to Bell. In Bell, the membrane 18 is attached to the adapter 12 which is equivalent to the cartridge 11 of the present application. There is no disclosure of a sensor releasably contained in a housing including a filter attached to the housing, the housing being coupled to the adapter 12.

Replacement sheets for Figures 1, 9 and 10 are attached to overcome the Examiner's objection to the drawings. No new matter has been included. Entry is requested.

Applicants have concurrently submitted a Request for Continued Examination with this Amendment.

Should the Examiner have any questions regarding this Amendment, the Examiner is invited to contact one of the undersigned attorneys at (312) 704-1890.

Respectfully submitted,

Dated: Sept 92009

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18 Ocket, Jeint of flading out what theatre is housing the rof flading out what theatre is housing the want-to set. Amiguarian Horology A clock-want-to set. Amiguarian Horology A clock-to-houses a clock by Thomas Fayrer of the houses a clock by Thomas Fayrer of th houses a cook of rhomas rayrer of

A microson and brick houses.

Build a house or houses. MB-1.15. 6 he shelter (as) in a house. 1.16. His take shelter (as) in a house. 1.16.

for a while during our stay. 12/haz/ u.t. Now nare, Br6, [f. House n.]

By (a house) with a textile house or housing. kebreak / hausbreik/ v. Pa. t. (rare) -broke Buk(b)n/. MH [f. HOUSE m. + BREAK v.] 1 Break into a house with intent to steal etc. EBreak into a nouse want intent to steat etc. eny as monasses. Chiefly N. Amer. B20.

Sisebreaker / hausbreiko/ n. LMH. [f. House H BREAKER n.] 1 A person who breaks into a his with intent to stead etc. (in Law form the destine only: cf. BURGIAR). LMB. 2 A the dayund one of the day of the mebreaking /hausbreakm/ n. 217. [f. metricards (maosocietis) n. E17. [f. to a house with intent to steal etc. (in Los merly in the daytime only: cf. BURGIARY).

useful /hausfol, -f(o)l/ n. MH. [f. House n. -put.] As much or as many as a house will

hid. is should finanshould fine a LME. If, House + Hold n, 1 a family in a house; a domestic abolishment. LME. + 2 The maintaining of a use or family; housekeeping. LME-1.16. ouse of the contents of a house; household

code and furniture. LME-E18.

for the Comments of the Pairfield household moved back to Leadon, E. Feinsman After his second wife's buk to Lendon. R. Penestrin After his second wife's stath, the household of Professor Tevetayev split up-lip Household spec the royal household. B atrib. or as adj. 1 Of or pertaining to a bauschold; domestic LMR. 2 Intimate, homely.

wh LME.

7L. STREET Good plain household judgment.

Special collections & comb.; household appliance a site of equipment used in the house, household book a book for the keeping of household accounts, household bread Hise, bread of an ordinary quality he household use, household effects the movable collens of a noise. Household parkets on being a hoseholder, household gods (a) gods presiding over a household, sp. (Rom. Hist.) the lares and penates; (i) the essentials of home life, household management the management of defectic affairs, management the management of domestic strains, as a sub-lety as a subject of study, household nature a well-hown mane, household science (chiefly N. Amer.) the study of household management, domestic science, household stuff arch. — household effects scence, houseftedd stuff arch. = household effect blove. household troops (in Britain) teops sominelly employed to guard the monarch, sousehold word a well-known name or saying. householdry n. (arch.) management of a household, eeping L16.

householder /'haushouldo/ n. LME. [f. HOUSE at + HOLDER n.1] A person who owns or rents a louse, flat, etc., as his or her own dwelling (Hist. with a type of occupancy bringing entitlement to the franchise); a head of a household or family. householdership n. E19.

bouseholding /'haushouldin/ n. Now rate.
tMB. [f. HOUSE n.1 + HOLDING n.] (Formerly) management or (later) occupancy of a house. housekeep / hauskip/ v.i. collog. Pa. t. & pple -kept /-kept/. M19. [Back-form, f. next or HOUSEKEEPING n. Cf. earlier HOUSEKEEPING a.

I.] Act as a housekeeper (for); keep house. housekeeper / haoski:po/ n. LME. ff. HOUSE n' + KEEPER n.] +1 = HOUSEHOLDER. IME-M19. +2 With qualifying adj.: a good etc. person in offering hospitality. M16-E18. 3 A puson in charge of a house, office, etc.; a

carctaker, M16. †b A guard dog. Only in 1.17. 4 spec. A person, esp. a woman, who manages the affairs of a household (in a large establishment usu, including supervision of any female servants) or (now) the cleaning of a hotel etc.; (with qualifying adj.) a good etc. person at managing household affairs. Formerly also, a person engaged in a domestic occupation. L16. 5 A person who keeps to the house, or stays at home. rare. E18,

housekeeping / hauskipm/ n. m.6. [f. House n. + Keeping n.] I Maintenance of a household, keeping a house; management of household affairs, transf. management of an organization's finances etc. M16. †2 Hospitulity. Usu, w. qualifying adj. Mr6-Mr9. 3 Money set aside or given for housekeeping expenses, housekeeping money, colloq. M20. 4 Those operations of a computer, an organization, etc., which make its work possible but do not directly constitute its performance, e.g. maintenance and

constitute is personance; recond-keeping. M20. 1 C. Onras We've st up housekeeping together, Joe. Abingdon Hirald The Vale's financial strategy, bated on continued good housekeeping and further capital injustament. 3 J. Pontrus H1 sak you for a bit more

housekeeping, that's a different story.

Comb. (see also nousekeeping a. 2): housekeeping allowance, money: set aside or given for usekeeping expenses.

housekeeping / hauskipm/ a. M16. [Sense t f. HOUSE n. + keeping pres. pple of KHEP v.; sense 2 the n. used attrib.] 1 That keeps a house or maintains a household. Now rare, Mr6. 2 Designating holiday or rented accommodation providing equipment for housekeeping; selfcatering. N. Amer. M20.

housekept v. pa. t. & pple of HOUSEKEEP.

housel / hauz(a)l/ n. & v. obs. exc. Ifist. [OE has! (whence ON has!) = Goth. hun! sacrifice, offering: ult. origin unkn.] A n. (The OE. B v.s. Infl. -II-, -I-. Administer the Eucharist to; in pass., receive the Eucharist. OF. houseling n. & a. (a) n. the action of the vb; (b) adj. (amib.) used at the celebration of the Eucharist: OR. houseless /'hausis/ a. LME. [f. nouse n. + TESS. I Without a house; homeless,

ouselessuess n. 119. housemaid /'hausmaid/ n. & v. L17. [f. HOUSE n.1 + MAID n.] A n. A female domestic servant,

esp. one in charge of reception rooms and bedrooms, L17. housenald's closet, cupboard: where cleaning materials are kept. house bursa in front of the kneecap, often the result of ent koceling.

B v.t. Look after in the manner of a housemaid; put in order, M19.

P. Deville One of his [the trial judge's] jobs is to housemaid the case... To get the evidence as clean

and tidy as he can.

houseman /hausmon/ n. Pl. -men. 1.18. [f. HOUSE n.1 + MAN n.] 1 A married labourer on a Norwegian farm. rare. L18. 2 (H-.) A member of Christ Church, Oxford ('the House'), M19. 3 A man responsible for general duties in a house, hotel, etc. Mrg. 4 A house physician or house surgeon, in Britain now usu. a qualified junior doctor working under supervision in a hospital before being fully registered as an independent medical practitioner, M20.

anship n. the position of being a houseman housemanship in a hospital M20

house-train /baustrem/ v.r. E20. [f. House n.1 TRAIN v.] Train (a domestic animal, an infant) to be clean in the house, teach where to urinate and defecate, joe, colleg, teach good manners or tidiness to, Usu, in pass.

housewife /'hauswaif, in sense 3 & dial. 'hazif/ zt. Pl. -wives /-warvz/. Also (now only in sense hussive /hazıv/, (esp. in sense 2) †huswife,
 MB, [f. House n. + wife n. Sec also hussy.] 1 A (married) woman who looks after domestic affairs of her household, esp. as her principal occupation; (with qualifying adj.) a good etc. domestic manager. MH. † 2 = HUSSY 3.

M16-E18. 3 A small case for sewing equipment.

housewifeship n. (chiefly Sc. & north.) housewifery ME. housewifish a, housewifely M19.

housewife / hauswaif/ v. Now rare, MI6. [f. the n.] I v.i. & t. (w. it). Be a (good) housewife; manage a household, esp. skilfully and economically, M16, 2 v.r. Manage as a (good) sewife, skilfully and economically. M17. 2 Desog I must housewife the money.

housewifely /'hauswafli/ a. LME. [f. as prec. + -LY'.] Pertaining to or characteristic of a (good) housewife; skilful and economical in managing household affairs. housewifeliness n. M16.

housewifery /'hauswifti/ n. LME. [f. as prec. + -ny.] 1 (Skill in) household management, housecraft; housekeeping, 1.ME, to Thrift, economy, M17-1.18, †2 collect. Articles of household use, M16-E19.

housewives n. pl. of housewipe n. housey /'hausi/ n. colleg. Also housie. M20.

[Abbrev. of next.] = HOUSE n. 111. housey-housey /haost'haosi/ n. Also housie-housis. M20. [f. HOUSE n. + -Y.] = HOUSE n.

TT. housic(-housie) ns. vars. of HOUSEY(-HOUSEY). housing /hauzu/ n. vas. a house n. or v. + -nvc. 1 1 Shelter (fike that of a house), bodging. ME. 2 Property consisting of houses; houses to buildings, collectively; spec. outbuildings

buildings, collectively; spec. outbuildings attached to a house. LME, b A house, a building. Long rare. LME. 3 Archit. A canopied niche for a statue or other image. Long obs. exc. Hist, LME, 4 Nant. A covering or roofing for a ship. E19. 5 Carpentry. A recess or groove in one piece of timber etc. for another to fit into. E19. 6 A massive metal frame or pillar that supports one end of a set of rolls in a rolling-mill. M19. 7 A structure that supports and encloses the bearings at the end of an axic or shaft, a journal-box, a need casing that encloses and protects any

piece of moving or delicate equipment L19. mats tyed about poles fastened in the earth, 2 J Kranrz I'll never accept the idea that public housing

II 8 The action of HOUSE v.3; esp. provision of houses, LME Comb.: housing association an association siming

Comic Housing as (relatively) low cost; housing development the act or process of planning and building a (large) group of houses; a housing estate; housing estate a residential area planned as a unit, and often having its own shops and other facilities; housing list a waiting-list for council houses; housing project: see PROJECT n. 6c; housing scheme a housing estate, esp. of council houses

housing /hauzin/ n.2 LMH. [f. House n.2 or u.2 + -ing.] A covering, esp. of cloth; spec. a covering put on a horse etc. for protection or ornament, trappings. Freq. in pl.

1

ornament, trappings, Prec, as pr.
houstonia /hu-istonia/ n. Etg. [mod.L (see
below), f. William Houron, Sc. botanist (d.
1733): see -na.] Any of various N. America
plants of the former genus Houstonia, of the madder family, now included in the genus Houstonia) caerulea.

houting / hautuy/ n. 119. [Du. f. MDu. hordie, of uncertain origin.] Either of two whitefish, valued in places for food, either (a) the rare anadromous form Coregonus oxyrhynchus, of Baltic coasts and rivers, or (b) the variable freshwater form Coregonus lavaretus, which occurs in lakes of northern Europe and Asia. Cf. which GWYNIAD, LAVARET, POWAN, SKELLY M. I.

houve n. see 1100 n.1

houghnhum /homon, 'hwmon/ n. B18. [The name (intended to suggest the neigh of a horse) of a fictional race of reasoning horses in Swift's Gulliver's Travels.] A horse considered as having human characteristics.

Hova / houve, hove/ n. & a. M19. [Malagasy.] A n. Pl. -s, same. A member of the dominant people of the Malagasy Republic (formerly Madagascar); the dialect of Malagasy spoken by